

#### Memorandum

Date:

JUL 26 2001

TO

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THROUGH:

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**FROM** 

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SUBJECT:

Preliminary Analysis of Stroller Restraint System Data

This memo provides a preliminary analysis of incident, injury and death data<sup>1</sup> on stroller restraint systems<sup>2</sup> as reported in the U.S. Consumer Product Safety Commission's (CPSC) data files. The incident reports referred to in this document not only include those with injuries and deaths, but incidents in which there appeared to be the potential for injury. These data are anecdotal and not a statistical sample of known probability. However, these data do give an indication of the types of restraint-related incidents occurring with strollers and also represent a minimum number of incidents.

# Incident Outcome<sup>3</sup>

During the time period of January 1, 1998 to March 27, 2001, there were 117 reports of incidents involving stroller restraint systems.<sup>4</sup> Table 1 shows a breakdown of the incidents as to outcome in terms of injury.

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Excepted by\_ Firms Notified,

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A search was conducted of the In-depth Investigation file (INDP), the Injury and Potential Injury Incident file (IPII), the Death Certificate file (DTHS) and the National Electronic Injury Surveillance System (NEISS) for January 1, 1998 through March 27, 2001.

<sup>&</sup>lt;sup>2</sup> For the purposes of this memorandum, a restraint system is defined as any part of the stroller that plays a role in keeping a child confined in the seat.

The 117 reports, in some instances, cited multiple incidents. However, sometimes the caregiver reporting the problem did not specify the exact number of times a particular type of restraint event happened, just that it happened multiple times. Hence, the 117 incidents referred to should be thought of as reports although they are referred to as incidents throughout this document. Therefore, the 117 incident reports are truly referring to a minimum number of cases.

<sup>&</sup>lt;sup>4</sup> Excluded from this analysis were the NEISS investigations from May 1, 1999 to September 30, 1999 that were the basis of a June 2000 report titled *Injuries Associated with Strollers* by Robin L. Ingle, M.A. et al. Reference is made to that report's findings on stroller restraints in the section of this memorandum titled *June 2000 Stroller Report*.

Table 1: Reported Stroller Incident Outcome Involving Restraints 1/1/98 to 3/27/2001<sup>5</sup>

	TOTAL	117
Deaths		1
Injuries		42
Incidents with No Injury		63
Unknown if Injured		11

Source: INDP, IPII, DTHS and NEISS

U.S. Consumer Product Safety Commission/EPHA

### **Deaths**

There was one reported death related to a stroller restraint system. It occurred when a 6-month-old male was lying unrestrained<sup>6</sup> on his back in the stroller, drinking juice. His 14-year-old uncle was caring for him at the time of the incident. The uncle left and came back to find the child face down against the seat with his feet hanging out through one of the leg holes of the stroller. The child's death was due to asphyxia.

### Injuries

The average age of the 42 children who were injured in incidents involving stroller restraint systems was 12 months. The injuries were evenly split among males and females (21 each). Head and facial region injuries accounted for 79 percent of all stroller restraint system-related injuries.

The injury incidents ranged in diagnosis from bumps, bruises, abrasions, contusions, welts and lacerations to more serious diagnoses such as a skull fracture, an abdominal hernia, a closed head injury and a case of near-miss strangulation that resulted in unconsciousness due to lack of oxygen. The types of injuries specific to a particular hazard pattern are discussed in the section titled *Hazards*.

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#### No Injury or Unknown if Injured

To illustrate the scope of the problems with stroller restraint systems as seen in CPSC's data files, non-injury incidents and incidents where an injury was not cited were included in the analysis. In many instances, these cases could be viewed as near misses with the potential for injury. For instance, a 4-month-old male secured by a 3-point restraint (waist and crotch straps)

<sup>&</sup>lt;sup>5</sup> A full description of all 117 reports of incidents with stroller restraint systems is provided in Appendix A, attached to this memorandum.

<sup>&</sup>lt;sup>6</sup> The scope of the restraint project includes cases where children were left unrestrained, to try to ascertain the circumstances and consequences of the types of incidents. In this case, the caretaker was a minor who left the child unattended while the child was unrestrained.

in a stroller that had no restraint bar leaned forward, pushing himself out of the restraint straps. His feet got tangled in the straps, but he was caught before hitting the ground.

In total, there were 74 incident reports that fell into these two categories of no injury or unknown if injured.

#### Hazards

In reviewing the data, a number of hazard patterns emerged among the 117 incident reports as they related to stroller restraint systems. Table 2 shows the breakdown of the incident reports among the hazard patterns.

Table 2: Stroller Restraint System Hazards by Number of Incident Reports 1/1/98 to 3/27/01

	Total	Deaths	Injuries	No Injury	Unknown if Injured
Total	117	1	42	63	11
Restraints Failed to Hold the Child	56	0	13	36	7
Restraints Unfastened	19	0	12	5	2
Child Slipped Down in Stroller	13	1	2	9	1
Restraint System Broke	10	0	4	5	1
Child Could Unbuckle Restraints	7	0	3	4	0
Straps Detached From the Stroller	6	0	3	3	0
Restraints Not Used	2	0	2	0	0
Entanglement	1	0	1	0	0
Other	3	0	2	1	0

Source: INDP, IPII, DTHS and NEISS

U. S. Consumer Product Safety Commission/EPHA

The following is a detailed discussion of the major hazard patterns associated with the 117 reports of restraint incidents presented in Table 2.

# Restraints failed to hold the child

Fifty-six children were involved in incidents where the restraint straps failed to hold the child in place in the stroller. The average age of these children was 11 months with the youngest child being 4 months old. Thirteen children were injured in this type of incident. Twelve of the injuries were the result of a fall from the stroller. One injury resulted from an 11-month-old girl catching her hand and finger tips in the right front wheel of the stroller when the waist straps loosened.

Eleven of the injuries were to the head and facial region (all the result of falls). The other two injuries were to a child's hand and fingertips (incident described above), and an abdominal injury discussed below. Overall, most of the injuries were bruises, bumps, abrasions or lacerations. However, this particular hazard resulted in one of the most unusual injuries associated with stroller restraints. A 10-month-old male, who was in the back seat of a double stroller, wiggled out of the seat belt, falling to the floor. Although he hit the back of his head, the injury he received was a lower abdominal hernia that the doctor said might have been caused by the child struggling to get out of the stroller or as a result of the fall.

The following were some common scenarios found in this data, where the restraint straps failed to hold the child in the stroller.

- Child turned or wiggled out of the restraints or simply stood up out of the restraints.
- Child leaned forward or sideways, falling, slipping or nearly falling out of the restraints. Some of the straps loosened when the child leaned and some did not.

In one incident, a 23-month-old male was in a reclining position in the stroller and got out of the restraint (a 2-point waist strap) by sliding backwards. This caused the stroller to tip over backwards, causing the child to slip out and hit his head on the floor.

These were all incidents where the child had been secured in the restraint straps. The child did not disengage the straps by unbuckling them nor did the buckle disengage by itself. There were a number of observations related to these incidents (either made by the consumer or stated in the report) concerning the restraint systems themselves; among them were:

- 1. The straps were positioned too low on the child's body. They fit at the top of child's thighs or at the lower hip area instead of at the waist, contributing to the problem.
- 2. Waist straps were attached at the sides of the stroller's seat rather than the back of the seat, allowing for more room at the sides for movement.
- 3. Straps either loosened easily or did not loosen, break or detach at all, but still did not hold the child in place. One consumer stated that the male portion of the clasp didn't have a locking mechanism to keep the strap from slipping.
- 4. Straps on a 5-point harness formed a U-shape at the waist that was wide enough for the child's body to wiggle through.

- 5. The waist belt was sewn to the bottom of the seat, which allows the child to get out of the belt easily. The belt should be attached to the back of the seat.
- 6. On a 5-point restraint there was no way to adjust it and the piece that comes across the chest moves up and down, allowing a child to get his or her arms out of the restraints.
- According to some of the caregivers, the child's ability to get out of the restraints or their failure to hold the child in place on the stroller seat was not an isolated occurrence. One 11 month-old girl was able to wiggle out of the restraint system, push herself up and stand up on the seat as many as 6 to 7 times a day.

### Restraints Unfastened

There were 19 reports of restraint straps that disengaged/unbuckled on a stroller. The average age of the children in these reports was 8 months old, with the youngest child being 5 months. Fifteen incidents involved a fall from the stroller, of which 12 resulted in injury.

All 12 of the injury incidents were the result of falls. Head and facial injuries were associated with 11 of the injury reports. Among the types of head and facial injuries incurred were bumps, lacerations, bruises, an abrasion, a contusion and a black eye. The remaining injury was bruised buttocks and legs.

The most common scenarios associated with the restraints disengaging were:

- The child lunged or leaned forward and the buckle came undone.
- The belt unlatched when the child moved/wiggled around in the stroller.
- ☐ The restraint straps released for no apparent reason without the child moving or wiggling.

There were some comments made in the reports concerning the restraints involved in the incidents, including:

- 1. Consumers thought that the child's stomach pressed against the release button or the child waved his/her hands around unintentionally hitting the buckle release.
- 2. Pressure would cause a correctly fastened buckle to release repeatedly.

# Child Slipped Down in the Stroller

There were 13 incidents where a child slipped down in the stroller. The average age of the children involved was 8 months with the youngest child being 2 months old. This was the only hazard category where a death was reported. The death was previously described in this document under the section titled **Deaths**.

There were two injuries reported with these incidents. A few times, between ages 2 and 9 months of age, one child twisted around in the secured and snugly fitting 2-point waist restraint, rolled onto her stomach and slipped feet first through the leg opening of the stroller. One time she ended up with the restraint belt around her neck and one shoulder. The child was hurt, but the type of injury was not specified. In the second injury incident, a 7-month-old male was in a reclining position and the consumer loosened the 2-point waist strap, allowing the child to move

down in the stroller. The waist strap became wrapped around the child's neck, resulting in a welt on his neck.

Among the scenarios with this particular hazard were:

- Both legs went through one leg opening or the child slipped out the leg opening.
  - Children slipped through between the restraint bar or feeding tray and seat. In one instance, the child was dragged under the stroller with his neck caught on the restraint bar.
  - Children slipped down in the stroller getting caught by restraints under armpits/arms, around face, around neck, and around neck and one shoulder.

In at least two of the incidents, the child rolled over into a prone position. Eight of the incidents involved strollers that had 2-point restraints on them and in 7 of those incidents the children got caught by the restraint. In 3 incidents, the child was not restrained.

One case involved questionable instructions on the part of the manufacturer regarding the crotch strap. The child had been restrained by the 2-point waist strap in the stroller and slid down in the seat to the point where the belt was under her arms. Her legs went through one leg hole. The child was uninjured, but the consumer still contacted the manufacturer. The manufacturer's representative referred the consumer to the owner's manual, which said that the crotch strap could be removed from the restraint bar and used with the waist strap. When the consumer tried that the child squirmed, tilted to one side and the base of the seat where the crotch strap attached began to lift away from the stroller.

### Restraint System Broke

There were 10 reports where the restraint system of the stroller broke. The average age of the children associated with these incidents was 12 months of age, the youngest child being 5 months. Four incidents of injury were reported with all of those resulting in head and facial injuries. The types of head injuries ranged from relatively minor with a bruise, bump and contusion to potentially serious with a closed head injury. All of the injuries were a result of a fall from the stroller.

Other consequences of the failure/breakage of stroller restraints included one child who had one side of her body partially slide down through a leg hole and another child who tried to stand up.

The types of breakage or failure related to the incidents were as follows:

- ☐ The t-strap or belt cracked or broke.
- The crotch strap became unstitched (unknown if it detached from stroller).
- The locking mechanism/buckle(s) detached from the strap.
- □ Part of the buckle broke or cracked.

All of the incidents involved failure or breakage of the straps or buckles. In several instances, the consumer mentioned that the failure occurred when pressure was applied from the weight of the child himself or the child leaned forward in the restraints.

#### Child Could Unbuckle Restraints

There were 7 reports of children being able to unbuckle the restraints of the stroller. The average age of these children was 21 months with the youngest child being 12 months of age. All three of the injuries sustained in this type of incident were to the head and facial area. The three injuries were a skull fracture, a bump to the forehead and multiple facial injuries (cut lip, scraped nose and cheek, and a large bump to the forehead). All of the injuries were the result of falls from the stroller.

Among the scenarios associated with this hazard were:

- □ Child got out of the stroller seat.
- □ Child leaned forward and almost fell out.
- ☐ Child stood up and fell out.
- ☐ Child fell headfirst out of stroller.

The types of buckles involved in these cases were unknown except for a partial description of one buckle as a push button release.

#### Restraint Straps Detached from the Stroller

There were 6 reports of restraint straps detaching from the stroller. The children associated with these incidents were on average 10 months of age with the youngest child being 6 months old. Three of the incidents resulted in injury and two of those injuries were due to falls from the strollers (a bruised face and head, and a cut to the chin and bleeding mouth). The third injury incident was the result of the crotch strap of a 5-point system becoming unstitched, allowing the child to slip down in the stroller to the point where the shoulder harness keeper and waist strap caught her at the neck. The child received a red mark on her neck as a result.

In the non-injury incidents, the children tried to climb out or stand up and one incident did not report any action on the part of the child.

The types of scenarios that occurred in which restraints detached from the stroller were as follows:

- The crotch strap detached from the clip, which held it to the bottom of the stroller's seat (a recurring problem in one case).
- The clip that attached the crotch strap to the stroller separated from it by supposedly slipping through the slot that holds it to the stroller.
- The crotch strap became unstitched or unscrewed from the stroller.
- ☐ The restraint system detached from the stroller at the back where it appeared to have been glued or stitched

All of these incidents involved 3-point restraint (waist and crotch) systems with the exception of one, which was a 5-point (waist, crotch and shoulder) system.

#### **Restraints Not Used**

There were 2 reports where the sole contributing factor in the incident was that the restraint straps were not used. The children involved in these incidents were 18 and 3 months of age. Both incidents resulted in facial injuries (a lip abrasion and a contused nose) from a fall. In one case the child fell when a sibling was pushing the stroller and in the other incident the child fell when the stroller wheels caught in a crack.

### Entanglement

There was one case of a 10-month-old male who became entangled in the restraints of his all-terrain stroller. The type of restraint was not specified, however the child was able to stand up and turn around while secured in the restraint system. The result was that the child became entangled in the shoulder straps. The straps were around his arms and across his neck, causing red marks to his arms and chest. The straps had to be cut off to free the child. It appeared that the shoulder straps were too long even on the tightest setting, according to the consumer.

### Other

The remaining 3 incidents were categorized as "other". One involved a 6-week-old male who fell out of a stroller that had a zippered pouch seat (like a sleeping bag) instead of a restraint strap and/or bar system. He sustained a black eye. A second report involved a consumer checking the restraints after placing her child in the stroller. The consumer pulled on the waist strap and it released even though she was positive she had locked the buckle "tongues" in to the buckle. Nothing happened to this child. (This was unlike the previous cases where the restraints unfastened in that the restraint unfastened during a test of the buckle.) In the last case, the child fell forward while restrained and the shoulder straps came up and caught her around the neck strangling her. She was found unconcious, taken to the emergency room and released from the hospital the next day.

### **Jogging Strollers**

Throughout this memorandum, strollers have been discussed in general, regardless of type. Among the data there have been incidents with many types of strollers, including jogging strollers which have vastly different designs from other types of strollers. There can be three wheels instead of four, seat construction is not as rigid and they are pushed at greater speeds than traditional-type strollers. Where photos were available, staff noted there were no restraint bars on these strollers.

One unique restraint feature noted on several of the jogging strollers<sup>7</sup> was the presence of a 3-point restraint that consisted of shoulder and crotch straps. In one incident, a child secured in this type of strap configuration slipped down in the jogging stroller's seat to the point where the straps were rubbing the sides of her face.

<sup>&</sup>lt;sup>7</sup> This type of restraint system was seen in only one other reported type of stroller (a multi-occupant 6 seat stroller).

At this point in time, there is not enough data associated with jogging strollers to identify any prevalent restraint-related hazard patterns.

### **Restraint Characteristics**

Among the types of strollers cited in these 117 reports were umbrella, jogging/all-terrain, combination, and multi-occupant (including tandem, double, and 6-seater) strollers.

Only 15 of the 117 reports identified a restraint bar as being present on the stroller and of those 8 had a crotch strap on the restraint bar. In one case, a stroller had a feeding tray (without a crotch bar or strap). Six of the strollers with restraint bars had 2-point waist restraints.

Of the restraint strap configurations reported there were 47 3-point waist and crotch systems; 19 2-point waist belts; 5 5-point shoulder, waist and crotch systems; and 3 3-point shoulder and crotch systems. There was only one incident reported where the stroller had no restraints (the zippered pouch seat previously mentioned under *Other* in the hazards section of this document).

## June 2000 Stroller Report

In early 1999, CPSC staff noted a growing number of consumer complaints associated with strollers. To learn more about stroller-related injuries a special study was conducted (through NEISS) from May 1, 1999 through September 30, 1999. The results of that study included a section on the involvement of restraint systems on strollers. Three hazard patterns were identified in the data:

- 1. The child defeated the restraint and fell from the stroller.
- 2. The child slipped through the restraint and out of the stroller.
- 3. The restraint came loose and the child fell out of the stroller.

In the cases where the restraint system was determined to have a role in the incident there were slightly more than 1,000 estimated injuries treated in hospital emergency rooms nationwide.

For the time period of this study, an estimated 5,331 injuries occurred where a restraint system was present on the stroller. Among the cases reporting that a restraint system was present at the time of the injury incident, 59 percent (3,152) reported that the system was in use and 39 percent (2,070) that the system was not in use. However, the report states that restraint use was not necessarily relevant with respect to the injuries in all cases.

The report stated that in this study, the use of restraint systems by the consumers may be overreported due to the fact that respondents may have tended to respond in a manner that is socially acceptable in terms of restraint use.

#### Comments

The most prevalent hazard scenario reported with stroller restraints was that the restraints failed to hold the child. That scenario accounted for almost half of the 117 incidents (56). The children in these cases appear to be wiggling out of the restraints or leaning forward or sideways in the restraints, often slipping or falling out of the stroller. As with high chairs, this may be a complex issue to address depending on such issues as type of restraint, position of the seat, depth of the seat and where the restraints are attached to the stroller.

The second most reported issue was restraints unfastening. This often happened when the child leaned forward and/or applied pressure to the straps. This suggests further investigation of the forces that a buckle can withstand and whether or not the buckle was actually secured/locked.

Two point waist straps and 3-point shoulder and crotch straps seem to present problems with children slipping down in the stroller. The children are often stopped by the straps as they slip down, but are found in a hazardous position against the straps themselves. Two-point restraint straps alone present a potential danger for a child slipping down in the stroller, especially when there is no restraint bar present. Finally, strollers don't always have a restraint bar and not all restraint bars have crotch straps. These may be areas for further study.

Jogging strollers seem to be a product to watch in terms of the overall design of the product, especially with regard to how and in what position the seat holds the child and how the restraints are configured. Although, these strollers may not command a great share of the stroller market today, continued monitoring of the incident data associated with these products may be warranted since they are used and constructed differently than other strollers.

4 H9910154A	3 H9940082A	2 10060229	 	1H0120272A	Document #	Restraint	Restraint	Child slip	Straps de	Child cou	HAZARD	Appendix A	
		!	! !			Restraints unfastened=RD	Restraint system broke=B	Child slipped down in the stroller=S	Straps detached from the stroller=D	Child could unbuckle restraints=U	HAZARD CODING:	dix A	
01/13/1998	00/00/1998	<u> </u>	but stroller was purchased in 1998	133	Date /	     		stroller=5	stroller=D	aints=U	:	;	
10 MO M	12 MO M		S. S	NOW SERVICE SE	Age/Sex		 	\		;	\ : :		
Lake Worth, FL	Allentown, PA	Mechanicsburg, PA	COMPONI Desperon, On	Boshorton Ou	City/State		:	Other=0	Entanglement≂E	Restraints not used=RN		Stroller Res	
3-point (waist and crotch)	3-point (waist and crotch) with no restraint bar	T-strap (3- point?)	restraints with a used and child feeding tray with, slid down S no crotch strap/bar		Type Restraint	: ;					:	Stroller Restraints 1/1/1998 to 3/27	
Climbs out of restraints and	Wiggled out of restraint. R	Strap cracked B	used and child slid down S	THE REAL PROPERTY.	Type Hazard Scenario		į	·		:		to 3/27/2001	
When consumer secures child in the stroller, he turns his body enabling him to stand up and climb out of the restraints. He has done	Child was secured in the stroller when consumer noticed he could wiggle out of the strap by moving around. He then stood up. No injury.	Consumer has had the stroller for 2 years and under normal use the t-strap has cracked, making the restraint system unsafe.	Child was not secured in the stroller and slid down between the seat and feeding tray. His backside was hanging off the edge of the seat. No injury. Consumer feels the tray should have been T-shaped	The same of the sa	Narrative								

Unbuckled one Child was secured in the stroller and	3-point (waist Unbuckled and crotch) and side of the	Joliet, IL	12 MO F	06/21/1998 12 MO F	17 H98/0058A
				2 incidents	
Unbuckled Child was secured in and unbuckled the	Unknown	Middletown, CT	18 MO M	06/09/1998	15 H98C0038A
to hold child in in the stroller. There were two instances seat <b>R</b> where she leaned and fell out of the stroller. In one instance, she banged her head and in another, dangled from the stroller. Unknown	crotch and shoulder) with se			2 incidents	
Restraints failed The 5-point harness does not hold the child	5-point (waist, R	Cocoa, FL	8 MOF	-	13 19860025A
No restraints O Child was placed in zippered pouch seat in a reclining position. The stroller was lifted and child fell out. There were no seat belts or any way of restraining the child to the seat. Seat is made of padded material the zips closed like a sleeping bag. Child suffered a black ever	No restraints N	Muncie, IN	6 WK M	05/14/1998 6 WK M	12 H9850133A 980519CCC5579 (Terminated IDI)
Restraints did not Child was secured in the stroller and leaned hold child <b>R</b> She received bruises to her nose and. forehead. The straps did not detach, break or loosen during the incident. Consumer feels it occurred because the waist straps are attached to the sides of the stroller's seat rather than the back. Consumer feels this design allows more room on the sides.	3-point (waist Rand crotch) ht	Germantown, MD	16 MO F	05/11/1998 16 MO F	11 H9850112A
Type Hazard Narrative Scenario	int	Age/Sex City/State Type Restra	Age/Sex	Date	Document #

Document #	Date	Age/Sex	City/State	Type Restraint	Type Hazard Scenario	Narrative
	<b>"在我们的一个</b>	CHANGE AND	STATESTICAL STATES OF THE STAT	THE RESERVE THE	是一种的一种的一种的一种的一种的一种的一种的一种的一种的一种的一种的一种的一种的一	新聞書の表示。 1975年 - 1975年 - 197
18 H9860232A	06/29/1998 33 MO F		North Brunswick, NJ	2-point (waist)	Stood up and fell out <b>R</b>	The child was secured by the waist strap, stood up in the stroller and fell forward out of
						it. The warst strap was pulled close against the child's waist. She received a laceration
 						to her forehead which was stitched in the ER.
19 H9880048A	07/00/1998 9 MO F		Benton, AR	2-point (waist)	Wiggled out of restraint. R	Stroller's waist strap fits at the top of the child's thighs instead of at her waist. She
						was secured in the stroller and wiggled out by moving her body backward in the seat.  No injury.
20 19890111A 21		10 MO M	Tacoma, WA	3-point (waist and crotch) with	Restraints unlatch	Child has fallen out of the stroller twice (on two separate days), landing on his head
	08/00/1998					causing bumps and bruises. The seat belt
	ב וויכוספוווס			release ouckies	_	loosens and unlatches when the child moves around and consumer thinks child may have hit the button release in waving his arms
29 H0870087A	07/04/1998 7 NO E			) 	): 	around.
190700047	07/04/1880		Martion, NJ	and crotch)	Restraints failed to hold child <b>R</b>	The child was secured in her stroller and leaned forward to touch her toes, slipping forward out of the stroller. Mother caucht
						her. No injury. The straps didn't detach or toosen. Consumer thinks they didn't hold the
						child because the waist strap fits at the lower hip area instead of the waist.
23 H9870287A	07/15/1998 13 MO F		Loveland, OH	2-point (waist)	Slipped down S	Child was secured in her stroller, slouched down and put both leas into one opening.
						She then rolled onto her stomach and slipped feet first through the leg opening
						where she was caught with the seat belt under her armpits. No injury.

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40 X9951715	39 990601HCC3345 No Sample	38 H9920345A	37 H9910038A	36 H0020118A
02/27/1999 16 MO F	02/25/1999 6 MO M	02/17/1999 5.5 MO M	01/04/1999 5 MO F	Date 01/00/1999
				Age/Sex 0
Benicia, CA	Giendale, AZ	Cheverly, MD	Westmont, NJ	City/State Type Restrai
Unknown	Information unknown on straps, but stroller has restraint bar with crotch strap	3-point (shoulder and crotch)	T-strap (3- point?)	<b>₹</b>
Restraints loosen	Unrestrained & submarined down leg hole S	Restraint disengaged RD	Restraints were undone RD	be Hazard enario Control Straints failed hold child in at R
Child fell out of the stroller onto her head with no injury. The lap belt was loose, although it had been tight when the child was put in the stroller. The child simply leaned against the belt and it loosened. The male portion of the clasp doesn't have a locking mechanism to keep the strap from slipping.	Child was lying on his back in stroller drinking juice, but unrestrained by a strap/seat belt. Caregiver left and came back to find child face down against the seat with his feet hanging out through one of the leg holes. <b>Death</b> due to asphyxiation.	Child was secured by harness that clips between the legs. The clip came loose and child's arm came out of one of the shoulder straps. The child fell sideways out of the stroller onto floor, bruising the right side of	Child was secured in stroller and then the straps were inexplicably undone. The child was dangling face down by her foot. No	Secured child leaned forward in stroller and slipped headfirst to the floor. No injury. The restraint straps did not loosen, detach or break.

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·—		Date	Age/Sex	City/State	Type Restraint	Type Hazard Scenario	Narrative
.	STATE OF THE PARTY	<b>"我们的一种"的</b>	14.2	第5万 <b>和</b> 扩大1700年2月5日本	からないできた。	*	さればないと、 では、 では、 では、 では、 では、 では、 では、 では、 では、 では
107	000901HAA2795 H080306A	08/25/2000 6 MO F	6 MO F	Livonia, MI			Child was restrained by the waist strap in her
	Sample #00-830-				on the restraint	stroller 3	where the belt was under her arms and her
	3852				bar		legs were through one leg hole. No injury.
							Manufacturer's representative referred
							consumer to the owner's manual which said
							that the crotch strap could be removed from
							strap. When the consumer did that and her
							child squirmed, her body tilted to one side
							and the base of the seat where the crotch
!	  -						strap is attached began to lift away from the stroller.
108	108 H00C0084A	09/00/2000	15 MO F	Bronx, NY	3-point (waist	Stitching	Child was secured in the stroller and leaned
					and crotch)	_	forward, falling to the ground. The stitching
						restraint D	of the stroller. The child had a cut to chin
<u>6</u>	109 H00B0341A	09/00/2000 15 MO F		Downingtown PA	I Inknown :-	Crotch strap	and bleeding mouth.
						became unsewn	the crotch strap's stitching came undone.
1				: :		. 8	No injury.
_ ;	H00A0079A	ON S MO F	o MO T	snaumburg, IL	and crotch) with	Freed self from	Child was secured in the stroller when she fell headfirst from a standing position. The
	No Sample				tray		harness was still fastened. Consumer
							believes the child pulled her legs out from
							the harness should fit the child higher up on
*   *   * -			1.		:		the waist. No injury.
	111 H00A0253A	10/20/2000 14 MO M		Huntington Beach, CA	2-point (waist)	Slipped down S	Child was strapped in the stroller by the waist belt and turned sideways starting to
					-		

restraints. He then fell through the area between the seat and foot rest, entrapping his head. He was rescued by the consumer and her sister. No injury.						No Sample	
	Stood up and out of restraints R	3-point (waist and crotch	Lynchburg, VA	14 MO M	01/11/2001 14 MO M		116
Child was in stroller and bent over, causing the restraint's plastic buckle to crack in the middle. He fell to the ground, suffering a	Buckle cracked B	Unknown	Centereach, NY	01/08/2001 19 MO M	01/08/2001	115 H0110151A	1
Child was strapped in the stroller and fell out. She landed on her head (unknown if injured). The belt doesn't offer enough restraint in the consumer's opinion.	Fell out of stroller R	Unknown	Santa Clara, CA	7.5 MO F	12/29/2000 7.5 MO F	114 100C0393	.!! 
was sleeping and propped up with a blanket. She fell forward and the shoulder straps came up and caught her around the neck, strangling her. (Father found later that on inspection one side of the buckle on the shoulder strap was broken, but its not stated if this contributed to the incident.) The child was found unconcious from momentary lack of oxygen and taken to ER. Released from hospital the following day.							
At day care and was strapped into stroller first in front seat. Restraint straps came across both shoulders of the victim. She	Strap caught around neck <b>O</b>	Unknown	Graham, NC	13 MO F	12/12/2000 13 MO F	NEISS No Sample	113
Child fell out of the stroller when the safety belt broke. Fell down 3 steps and suffered a closed head injury.	Safety belt broke CB b	iknown	Unknown Ur	5 MO M	12/09/2000 5 MO M	NEISS	112
arrative	Type Hazard Scenario	pe Restraint	Date Age/Sex City/State	Age/Sex	Date	Document #	İ

-	117	;		
Total=117	010220HCC2250 H0120096A No Sample	3 1 2 2 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1		Document #
į	01/31/2001	1 145 K. W. W. St. A. C. C. C. C.		Date
	8 MO M	2 2 2 2		Age/Sex City/State
:	117 010220HCC2250 01/31/2001,8 MO M Mount Prospect, IL 3-point (waist H0120096A no restraint ba and side releable buckle	Manager and the second		City/State
	ise ar in the	Commence of the Commence of th		Type Restraint Type Hazard
	Buckle disengaged RD		Scenario	Type Hazard
	Child was secured in stroller and apparently leaned forward against the restraint, causing the buckle to release. The child fell to the floor striking his forehead, suffering a bump. Consumer and husband found that even with the buckle correctly fastened that pressure would cause it to release repeatedly.			Narrative
	ller and apparently le restraint, causing le child fell to the suffering a bump. ound that even with ned that pressure repeatedly.			

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